OIPE
NOV 12 2004
JC21
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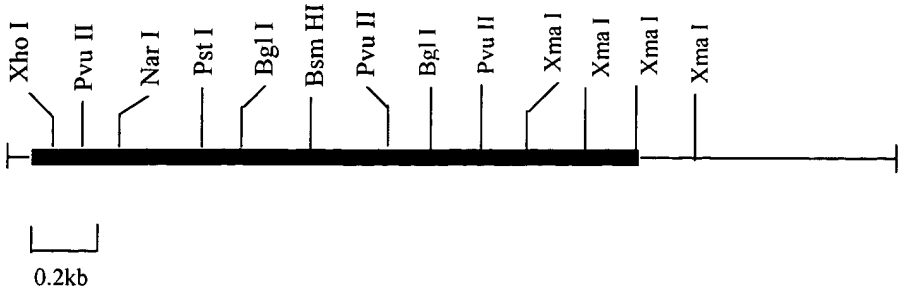
Fig. 1A

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        -12                                                                  39
 GG GCG GAC TCT AAA ATG AAT CCC GAT CTG GAC ACC GGC CAC AAC ACA TCA GCA
                    M   N   P   D   L   D   T   G   H   N   T   S   A
                                                            ↑               93
CCT GCC CAA TGG GGA GAG TTG AAA GAT GCC AAC TTC ACT GGC CCC AAC CAG ACC
 P   A   Q   W   G   E   L   K   D   A   N   F   T   G   P   N   Q   T
                                    ↑                           ↑          147
TCG AGC AAC TCC ACA CTG CCC CAG CTG GAC GTT ACC AGG GCC ATC TCT GTG GGC
 S   S   N   S   T   L   P   Q   L   D   V   T   R   A   I   S   V   G
         ↑                                                               201
CTG GTG CTG GGC GCC TTC ATC CTC TTT GCC ATT GTG GGC AAC ATC CTG GTC ATC
 L   V   L   G   A   F   I   L   F   A   I   V   G   N   I   L   V   I
                                                                         255
CTG TCA GTG GCC TGC AAT CGG CAC CTG CGG ACG CCC ACC AAC TAC TTC ATT GTC
 L   S   V   A   C   N   R   H   L   R   T   P   T   N   Y   F   I   V
                                                                         309
AAC CTG GCC ATT GCT GAC CTG CTG TTG AGT TTC ACA GTC CTG CCC TTC TCC GCT
 N   L   A   I   A   D   L   L   L   S   F   T   V   L   P   F   S   A
                                                                         363
ACC CTA GAA GTG CTT GGC TAC TGG GTT CTG GGG CGC ATC TTC TGT GAC ATC TGG
 T   L   E   V   L   G   Y   W   V   L   G   R   I   F   C   D   I   W
                                                                         417
GCA GCG GTG GAC GTC CTG TGC TGT ACG GCC TCC ATC CTG AGC CTA TGT GCC ATC
 A   A   V   D   V   L   C   C   T   A   S   I   L   S   L   C   A   I
                                                                         471
TCC ATT GAT CGC TAC ATT GGG GTG CGC TAC TCT CTG CAG TAC CCC ACT CTG GTC
 S   I   D   R   Y   I   G   V   R   Y   S   L   Q   Y   P   T   L   V
                                                                         525
ACC CGC AGG AAG GCC ATC TTG GCA CTC CTC AGT GTG TGG GTT TTG TCC ACG GTC
 T   R   R   K   A   I   L   A   L   L   S   V   W   V   L   S   T   V
                                                                         579
ATC TCC ATC GGG CCT CTC CTT GGA TGG AAA GAA CCA GCG CCC AAC GAC GAC AAG
 I   S   I   G   P   L   L   G   W   K   E   P   A   P   N   D   D   K
                                                                         633
GAA TGC GGA GTC ACC GAA GAA CCC TTC TAT GCC CTC TTT TCC TCC CTG GGC TCC
 E   C   G   V   T   E   E   P   F   Y   A   L   F   S   S   L   G   S
                                                                         687
TTC TAC ATC CCA CTC GCG GTC ATT CTG GTC ATG TAC TGC CGG GTC TAC ATC GTG
 F   Y   I   P   L   A   V   I   L   V   M   Y   C   R   V   Y   I   V
                                                                         741
GCC AAG AGG ACC ACC AAG AAC CTG GAG GCT GGA GTC ATG AAG GAG ATG TCC AAC
 A   K   R   T   T   K   N   L   E   A   G   V   M   K   E   M   S   N
                                                                         795
```

Fig. 1B

```
TCC AAG GAG CTG ACC CTG AGG ATC CAC TCC AAG AAC TTT CAT GAG GAC ACC CTC
 S   K   E   L   T   L   R   I   H   S   K   N   F   H   E   D   T   L
                                peptide 1                                  849
AGC AGT ACC AAG GCC AAG GGC CAC AAC CCC AGG AGT TCC ATA GCT GTC AAA CTT
 S   S   T   K   A   K   G   H   N   P   R   S   S   I   A   V   K   L
                                                                           903
TTT AAG TTC TCC AGG GAA AAG AAA GCA GCC AAA ACC TTG GGC ATT GTG GTC GGA
 F   K   F   S   R   E   K   K   A   A   K   T   L   G   I   V   V   G
                                                                           957
ATG TTC ATC TTG TGT TGG CTC CCC TTC TTC ATC GCT CTC CCA CTT GGG TCC CTG
 M   F   I   L   C   W   L   P   F   F   I   A   L   P   L   G   S   L
                            peptide 2                                      1011
TTC TCC ACT CTC AAG CCC CCG GAC GCC GTG TTC AAG GTG GTA TTC TGG CTG GGC
 F   S   T   L   K   P   P   D   A   V   F   K   V   V   F   W   L   G
                                                                           1065
TAC TTC AAC AGC TGC CTG AAC CCC ATC ATC TAC CCG TGC TCC AGC AAG GAG TTC
 Y   F   N   S   C   L   N   P   I   I   Y   P   C   S   S   K   E   F
                                                                           1119
AAG CGC GCC TTC ATG CGT ATC CTT GGG TGC CAG TGC CGT AGT GGC CGT CGC CGC
 K   R   A   F   M   R   I   L   G   C   Q   C   R   S   G   R   R   R
                                                                           1173
GCG CGC CGC CGT CGT CTG GGC GCG TGC GCT TAC ACC TAT CGG CCG TGG ACG CGC
 R   R   R   R   R   L   G   A   C   A   Y   T   Y   R   P   W   T   R
                                                                           1227
GGC GGC TCG CTG GAG CGA TCG CAG TCG GGG AAG GAC TCC CTG GAC GAC AGC GGC
 G   G   S   L   E   R   S   Q   S   R   K   D   S   L   D   D   S   G
                                                                           1281
AGC TGC ATG AGT GGC AGC CAG AGG ACC CTG CCC TCG GCG TCG CCC AGC CCG GGC
 S   C   M   S   G   S   Q   R   T   L   P   S   A   S   P   S   P   G
                                                                           1335
TAC CTG GGT CGC GGA GCG CAG CCA CCA CTG GAG CTG TGC GCC TAC CCC GAA TGG
 Y   L   G   R   G   A   Q   P   P   L   E   L   C   A   Y   P   E   W
                                                                           1389
AAA TCC GGG GCT CTG CTC AGT CTG CCA GAG CCT CCG GGT CGC CGC GGT CGC CTC
 K   S   G   A   L   L   S   L   P   E   P   P   S   R   R   G   R   L
                                                                           1443
GAC TCT GGG CCC CTC TTC ACT TTC AAG CTC TTG GGA GAG CCG GAG AGC CCG GGC
 D   S   G   P   L   F   T   F   K   L   L   G   E   P   E   S   P   G
                                                                           1497
ACC GAG GGC GAT GCC AGC AAT GGG GGC TGC GAC GCA ACG ACC GAC CTG GCC AAT
 T   E   G   D   A   S   N   G   G   C   D   A   T   T   D   L   A   N
                                                                           1551
GGG CAG CCC GGT TTC AAG AGC AAC ATG CCT CTG GCA CCC GGG CAC TTT TAG GGT
 G   Q   P   G   F   K   S   N   M   P   L   A   P   G   H   F
                                        peptide 3                          1605
CCC TTT TCT TTC CCC CAC ACA CAC CCC AGG GGG GAG GAC ACC ATT GTG GGG GGC
                                                                           1659
GGG GGC ATG GGG GGG AGT GTC AGC CCC GGG TAG ACA CAG GGT CGC AAG GGT ACA
                                                                           1713
AGG GGG GAG GGG GGC GGG GAG AGG GGC AGC TGC TTT TCT GGC AGG GGC ATG GCT
                                                                           1767
GCC AGG TAC AGC GGA GAG CTG GCT GCG CAT GCT GAG AGC CTG GGG ACC CAC CCC
                                                                           1821
CAA CGC TGG CCG GGA CTT AAG TCT CTC TCT TCT CTC TCT CTG TAT ATA TAT AAA
                                                                           1875
GAG TCC CTC TAT ACG TAT TTA TCT GTG GGT ACA CGT GCG TGT GTC TGT GCG GTG
                                                                           1929
```

Fig. 1C

```
AAC GTG TGG GCT GCA TGG ATG TGT GTT GGG GGC CTG CCC ACT TGC GCG TGC TGG
                                                                    1983
GGC AGA GCG AGT GTG TGC CCT GGC AAT GTC AGG TTT GTT GTT TGT CTC TTG ACT
                                                                    2037
TGT ACC TCT CAA GCC CCT CCT TGT TCT CTG GTC AAT GCT GGC ATT TTG ATG GGG
                                                                    2091
TTG GAA ACC AAG TCA GAT ATT AAA AAT CAT TTC TCG TGA AAA AAA AAA AAA
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CTG-CAG

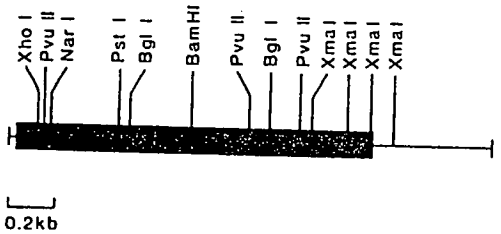

Fig. 1

```
                                                                                                                    903
TTT AAG TTC TCC AGG GAA AAG AAA GCA GCC AAA ACC TTG GGC ATT GTG GTC GGA
F  K  F  S  R  E  K  K  A  A  K  T  L  G  I  V  V  G
                                                                                                                    957
ATG TTC ATC TTG TGT TGG CTC CCC TTC TTC ATC GCT CTC CCA CTT GGC TCC CTG
M  F  I  L  C  W  L  P  F  F  I  A  L  P  L  G  S  L
                                  peptide 2
                                                                                                                   1011
TTC TCC ACT CTC AAG CCC CCG GAC GCC GTG TTC AAG GTG GTA TTC TGG CTG GGC
F  S  T  L  K  P  P  D  A  V  F  K  V  V  F  W  L  G
                                                                                                                   1065
TAC TTC AAC AGC TGC CTC AAC CCC ATC ATC TAC CCG TGC TCC AGC AAG GAG TTC
Y  F  N  S  C  L  N  P  I  I  Y  P  C  S  S  K  E  F
                                                                                                                   1119
AAG CGC GCC TTC ATG CGT ATC CTT GGG TGC CAG TGC CGT AGT GGC CGT CGC CGC
K  R  A  F  M  R  I  L  G  C  Q  C  R  S  G  R  R  R
                                                                                                                   1173
CGC CGC CGC CGT CGT CTG GGC GCG TGC GCT TAC ACC TAT CGG CCG TGG ACG CGC
R  R  R  R  R  L  G  A  C  A  Y  T  Y  R  P  W  T  R
                                                                                                                   1227
GGC GGC TCG CTG GAG CGA TCG CAG TCG CGG AAG GAC TCC CTG GAC GAC AGC GGC
G  G  S  L  E  R  S  Q  S  R  K  D  S  L  D  D  S  G
                                                                                                                   1281
AGC TGC ATG AGT GGC AGC CAG AGG ACC CTG CCC TCG GCG TCG CCC AGC CCG GGC
S  C  M  S  G  S  Q  R  T  L  P  S  A  S  P  S  P  G
                                                                                                                   1335
TAC CTG GGT CGC GGA GCG CAG CCA CCA CTG GAG CTG TGC GCC TAC CCC GAA TGG
Y  L  G  R  G  A  Q  P  P  L  E  L  C  A  Y  P  E  W
                                                                                                                   1389
AAA TCC GGG GCT CTG CTC AGT CTG CCA GAG CCT CCG GGT CGC CGC GGT CGC CTC
K  S  G  A  L  L  S  L  P  E  P  P  G  R  R  G  R  L
                                                                                                                   1443
GAC TCT GGG CCC CTC TTC ACT TTC AAG CTC TTG GGA GAG CCG GAG AGC CCG GGC
D  S  G  P  L  F  T  F  K  L  L  G  E  P  E  S  P  G
                                                                                                                   1497
ACC GAG GGC GAT GCC AGC AAT GGG GGC TGC GAC GCA ACG ACC GAC CTG GCC AAT
T  E  G  D  A  S  N  G  G  C  D  A  T  T  D  L  A  N
                                                                                                                   1551
GGG CAG CCC GGT TTC AAG AGC AAC ATG CCT CTG GCA CCC GGG CAC TTT TAG GGT
G  Q  P  G  F  K  S  N  M  P  L  A  P  G  H  F
                                  peptide 3
                                                                                                                   1605
CCC TTT TCT TTC CCC CAC ACA CAC CCC AGG GGG GAG GAC ACC ATT GTG GGG GGC
                                                                                                                   1659
GGG GGC ATG GGG GGG AGT GTC AGC CCC GGG TAG ACA CAG GGT CGC AAG GGT ACA
                                                                                                                   1713
AGG GGG GAG GGG GGC GGG GAG AGG GGC AGC TGC TTT TCT GGC AGG GGC ATG GGT
                                                                                                                   1767
GCC AGG TAC AGC GGA GAG CTG GCT GCG CAT GCT GAG AGC CTG GGG ACC CAC CCC
                                                                                                                   1821
CAA CGC TGG CCG GGA CTT AAG TCT CTC TCT TCT CTC TCT CTG TAT ATA TAT AAA
                                                                                                                   1875
GAG TCC CTC TAT ACG TAT TTA TCT GTG GGT ACA CGT GCG TGT GTC TGT GCG GTG
                                                                                                                   1929
AAC GTG TGG GCT GCA TGG ATG TGT GTT GGG GGC CTG CCC ACT TGC GCG TGC TGG
                                                                                                                   1983
GGC AGA GCG AGT GTG TGC CCT GGC AAT GTC AGG TTT GTT GTT TGT CTC TTG ACT
                                                                                                                   2037
TGT ACC TCT CAA GCC CCT CCT TGT TCT CTG GTC AAT GCT GGC ATT TTG ATG GGG
                                                                                                                   2091
TTG GAA AGG AAT TGA TGA
```

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                                                                                                                    39
      -12                 1
GG GCG GAC TCT AAA ATG AAT CCC GAT CTG GAC ACC GGC CAC AAC ACA TCA GCA
                    M  N  P  D  L  D  T  G  H  N  T  S  A
                                                                                                                    93
CCT GCC CAA TGG GGA GAG TTG AAA GAT GCC AAC TTC ACT GGC CCC AAC CAG ACC
P  A  Q  W  G  E  L  K  D  A  N  F  T  G  P  N  Q  T
                                                                                                                   147
TCG AGC AAC TCC ACA CTG CCC CAG CTG GAC GTT ACC AGG GCC ATC TCT GTG GGC
S  S  N  S  T  L  P  Q  L  D  V  T  R  A  I  S  V  G
                                                                                                                   201
CTG GTG CTG GGC GCC TTC ATC CTC TTT GCC ATT GTG GGC AAC ATC CTG GTC ATC
L  V  L  G  A  F  I  L  F  A  I  V  G  N  I  L  V  I
                                                                                                                   255
CTG TCA GTG GCC TGC AAT CGG CAC CTG CGG ACG CCC ACC AAC TAC TTC ATT GTC
L  S  V  A  C  N  R  H  L  R  T  P  T  N  Y  F  I  V
                                                                                                                   309
AAC CTG GCC ATT GCT GAC CTG CTG TTG AGT TTC ACA GTC CTG CCC TTC TCC GCT
N  L  A  I  A  D  L  L  L  S  F  T  V  L  P  F  S  A
                                                                                                                   363
ACC CTA GAA GTG CTT GGC TAC TGG GTT CTG GGG CGC ATC TTC TGT GAC ATC TGG
T  L  E  V  L  G  Y  W  V  L  G  R  I  F  C  D  I  W
                                                                                                                   417
GCA GCG GTG GAC GTC CTG TGC TGT ACG GCC TCC ATC CTG AGC CTA TGT GCC ATC
A  A  V  D  V  L  C  C  T  A  S  I  L  S  L  C  A  I
                                                                                                                   471
TCC ATT GAT CGC TAC ATT GGG GTG CGC TAC TCT CTG CAG TAC CCC ACT CTG GTC
S  I  D  R  Y  I  G  V  R  Y  S  L  Q  Y  P  T  L  V
                                                                                                                   525
ACC CGC AGG AAG GCC ATC TTG GCA CTC CTC AGT GTG TGG GTT TTG TCC ACG GTC
T  R  R  K  A  I  L  A  L  L  S  V  W  V  L  S  T  V
                                                                                                                   579
ATC TCC ATC GGG CCT CTC CTT GGA TGG AAA GAA CCA GCG CCC AAC GAC GAC AAG
I  S  I  G  P  L  L  G  W  K  E  P  A  P  N  D  D  K
                                                                                                                   633
GAA TGC GGA GTC ACC GAA GAA CCC TTC TAT GCC CTC TTT TCC TCC CTG GGC TCC
E  C  G  V  T  E  E  P  F  Y  A  L  F  S  S  L  G  S
                                                                                                                   687
TTC TAC ATC CCA CTC GCG GTC ATT CTG GTC ATG TAC TGC CGG GTC TAC ATC GTG
F  Y  I  P  L  A  V  I  L  V  M  Y  C  R  V  Y  I  V
                                                                                                                   741
GCC AAG AGG ACC ACC AAG AAC CTG GAG GCT GGA GTC ATG AAG GAG ATG TCC AAC
A  K  R  T  T  K  N  L  E  A  G  V  M  K  E  M  S  N
                                                                                                                   795
TCC AAG GAG CTG ACC CTG AGG ATC CAC TCC AAG AAC TTT CAT GAG GAC ACC CTC
S  K  E  L  T  L  R  I  H  S  K  N  F  H  E  D  T  L
                                  peptide 1
                                                                                                                   849
AGC AGT ACC AAG GCC AAG GGC CAC AAC CCC AGG AGT TCC ATA GCT GTC AAA CTT
S  S  T  K  A  K  G  H  N  P  R  S  S  I  A  V  K  L
```

Fig. 2A

```
      3         9        15        21        27        33        39        45
      |         |         |         |         |         |         |         |
  1 TCG ACT GCC CAG TGC CCT TTG CCT CTG CAC CAT CTC CAT GAT CAA
    AGC TGA CGG GTC ACG GGA AAC GGA GAC GTG GTA GAG GTA CTA GTT

 46 TGA GCT AAG GTA CCA GGA GCT CCA ACA GGT TCA CAC TAC CAC AAA
    ACT CGA TTC CAT GGT CCT CGA GGT TGT CCA AGT GTG ATG GTG TTT

 91 CCT CAA AAA TAG GCA TCT CTT ATG TTT AAA TCT CTA AAG GCA GCT
    GGA GTT TTT ATC CGT AGA GAA TAC AAA TTT AGA GAT TTC CGT CGA

136 TAG GTA AGA TAG TTG AAA TGA GGG CAG GGA CTG TTT TCA AAG CTA
    ATC CAT TCT ATC AAC TTT ACT CCC GTC CCT GAC AAA AGT TCC GAT

181 TCT GAA TCA TTG TTT GTT TGT TTG TTT GTT TGT TAT CTC AGA GAA
    AGA CTT AGT AAC AAA CAA ACA AAC AAA CAA ACA ATA GAG TCT CTT

226 ACT CCT TAG AAT TGT ATA TTT TGT GCA ACT GGA GAG CTT GTG CCA
    TGA GGA ATC TTA ACA TAT AAA ACA CGT TGA CCT CTC GAA CAC GGT

271 TTT TTA ATA GGA GAT TAA GGA CCT TAA ACG TAT AGT GGG TGA TAC
    AAA AAT TAT CCT CTA ATT CCT GGA ATT TGC ATA TCA CCC ACT ATG

316 ATG CTT GTA ACA ACA ACA CTA AGA GGC TGG GAA AAG AGG AAG ATT
    TAC GAA CAT TGT TGT TGT GAT TCT CCG ACC CTT TTC TCC TTC TAA

361 ATC ATG ATT TTG GGG CCA GCC TGG GCT AAT AAT AAG TTC TAG GCC
    TAG TAC TAA AAC CCC GGT CGG ACC CGA TTA TTA TTC AAG ATC CGG

406 AGC CTA GGC CCA AGT AAG ACC ATC TCT CAA ACA AGC AAT CAA AGG
    TCG GAT CCG GGT TCA TTC TGG TAG AGA GTT TGT TCG TTA GTT TCC

451 CTG GAG AGT TGT CTC AGC AGA TAA GGG CAT TTG GTG CTC TTG CAG
    GAC CTC TCA ACA GAG TCG TCT ATT CCC GTA AAC CAC GAG AAC GTC

496 AGG ACT CGG GTC CAA TTC CCA CCA CCC AAA TGG TGG CTC ACA ACC
    TCC TGA GCC CAG GTT AAG GGT GGT GGG TTT ACC ACC GAG TGT TGG

541 ATC CCA ACT TCA GCT TCA GAG GAC CCC ATG CCC ATC TGT CAA CTT
    TAG GGT TGA AGT CGA AGT CTC CTG GGG TAC GGG TAG ACA GTT GAA

586 TCA CAG GCA GCA AAG CAG GCA ATG AAT GTA ATA CTC ACA CGC AAA
    AGT GTC CGT CGT TTC GTC CGT TAC TTA CAT TAT GAG TGT GCG TTT

631 AAA AAA AAA AAA AAA AAA AAG ACA GTA AAT TAA AAG AAA CAA ATA
    TTT TTT TTT TTT TTT TTT TTC TGT CAT TTA ATT TTC TTT GTT TAT

676 AAC AAA AAA CGT AAT CTT CTC CAA AAA GTA CAA GCA AAA AGA CTT
    TTG TTT TTT GCA TTA GAA GAG GTT TTT CAT GTT CGT TTT TCT GAA
```

Fig. 2B

```
 721 CAA AAG CCC AAC TTT AGG CTG AAG AAC TTG CAC AGG AAC CGC CTT
     GTT TTC GGG TTG AAA TCC GAC TTC TTG AAC GTG TCC TTG GCG GAA

 766 GCA TGG CCC CTG CTT CCT TGC CCC TTA ATC AAA ATA CAG CGA CTA
     CGT ACC GGG GAC GAA GGA ACG GGG AAT TAG TTT TAT GTC GCT GAT

 811 TCA AAA GCA GAA ATT AGA AGC CTG GGC CAT GGC TTG TGG ACT GGA
     AGT TTT CGT CTT TAA TCT TCG GAC CCG GTA CCG AAC ACC TGA CCT

 856 AGA AAT GGG TAT CAG GTG TCT CCT TGC AAT TCA GCA GCC ACT GCC
     TCT TTA CCC ATA GTC CAC AGA GGA ACG TTA AGT CGT CGG TGA CGG

 901 CTG TCC CCT GCC TCA TGT CAC TAG CAT ATG ACT AAC TCT CTG ATC
     GAC AGG GGA CGG AGT ACA GTG ATC GTA TAC TGA TTG AGA GAC TAG

 946 TAC TGT TTT CTC GTG TGT CCA CAG AGA GCA GTG ATG CCT CTC TCT
     ATG ACA AAA GAG CAC ACA GGT GTC TCT CGT CAC TAC GGA GAG AGA

 991 CAA AGA CTT GTT AAA GAA AAA TAA AAG AAA ATA AGT AAG CTG GGT
     GTT TCT GAA CAA TTT CTT TTT ATT TTC TTT TAT TCA TTC GAC CCA

1036 GTG GTG TCT TAT GCT TGT AAT CCA AGC ACT GGG GAG GTG GGG GCC
     CAC CAC AGA ATA CGA ACA TTA GGT TCG TGA CCC CTC CAC CCC CGG

1081 AAC GGA TTT TGG GGT TTG GGA CAA TAT TGG TCT GCA TAG TGA GCT
     TTG CCT AAA ACC CCA AAC CCT GTT ATA ACC AGA CGT ATC ACT CGA

1126 CAA GAC CAG TGT GAG CTA CAC AGC AAG AAA AGG GAA GAG AAG AGA
     GTT CTG GTC ACA CTC GAT GTG TCG TTC TTT TCC CTT CTC TTC TCT

1171 AGA GAA GAG AAG AGA AGA GAG GAG AGG AGA GGA GAG GAG AGG AGA
     TCT CTT CTC TTC TCT TCT CTC CTC TCC TCT CCT CTC CTC TCC TCT

1216 GAG AGA GGA GAG GAG AGG AGA GGA GAG GAG AGG AGG GAG AGG AGA
     CTC TCT CCT CTC CTC TCC TCT CCT CTC CTC TCC TCC CTC TCC TCT

1261 GGA GGG GAG AGA AAT AAG TAA ATG TTT GAT GAA CAG TAG GAG CTC
     CCT CCC CTC TCT TTA TTC ATT TAC AAA CTA CTT GTC ATC CTC GAG

1306 AGC AAA TGT GGG TTC CTT CCC AGT AGC ACT AAC TTG AGC CCC AAA
     TCG TTT ACA CCC AAG GAA GGG TCA TCG TGA TTG AAC TCG GGG TTT

1351 ATG AGC CAT TTA AAA AAA AAG CCC AAG TTA TAA CAT TTA CTC TAT
     TAC TCG GTA AAT TTT TTT TTC GGG TTC AAT ATT GTA AAT GAG ATA

1396 CCC CTA TTT TGC TCC TAT AGA AAC GGT GAC TCT TCT ATG GCT CAG
     GGG GAT AAA ACG AGG ATA TCT TTG CCA CTG AGA AGA TAC CGA GTC

1441 TAC TCA GCA CTA GAA TAA GGA AAC CCA GTA ATG ACA TTC AAC TCC
     ATG AGT CGT GAT CTT ATT CCT TTG GGT CAT TAC TGT AAG TTG AGG
```

Fig. 2C

```
1486 AAC TCA CCC TTC CTC TCC TCA ATA GGC ATA TGT ACT TGA AAA AAA
     TTG AGT GGG AAG GAG AGG AGT TAT CCG TAT ACA TGA ACT TTT TTT

1531 CGG CTC AAC TCC CTT ATC ACA CGG GTC CCA TCC TCA AAA CAG AAA
     GCC GAG TTG AGG GAA TAG TGT GCC CAG GGT AGG AGT TTT GTC TTT

1576 TCA AAA TGA GAC TAG TTC TCT CAT CAA GTC GGG AGA AAA GGC AGC
     AGT TTT ACT CTG ATC AAG AGA GTA GTT CAG CCC TCT TTT CCG TCG

1621 ATG AAC GTA GCA CAT GGT CTA GCA TCT AAG TAT TGG GAG ACA GAG
     TAC TTG CAT CGT GTA CCA GAT CGT AGA TTC ATA ACC CTC TGT CTC

1666 AAT CTT GAG TTC AAA ACC AAC CTG AAG ACC TTC TTT CTT TTT TTT
     TTA GAA CTC AAG TTT TGG TTG GAC TTC TGG AAG AAA GAA AAA AAA

1711 TTT TTT TTT TTT TTT TTT TGA AGA CCT TCT TTC TAA AAA CAA ACA
     AAA AAA AAA AAA AAA AAA ACT TCT GGA AGA AAG ATT TTT GTT TGT

1756 AAC AAA CAA ACA AAC AAG AAA ATT CTT CCC TGG TTT GAC TTT TTT
     TTG TTT GTT TGT TTG TTC TTT TAA GAA GGG ACC AAA CTG AAA AAA

1801 CTT CTT CCT TTT TGT AAT TAC CCA CCT CTG GAA ATA GGG TTT GTA
     GAA GAA GGA AAA ACA TTA ATG GGT GGA GAC CTT TAT CCC AAA CAT

1846 GCC TAA TAG CCT ACA TGT ATA CAA GGC AAT ACA AGA AAA GAG CCA
     CGG ATT ATC GGA TGT ACA TAT GTT CCG TTA TGT TCT TTT CTG GGT

1891 ACA GGC AAG ACC CCC CCC CCC AAG TCC CTT CCC CAG GAT TTG GCA
     TGT CCG TTC TGG GGG GGG GGG TTC AGG GAA GGG GTC CTA AAC CGT

1936 ATC AGT CCT CAC TCT CTA CTC CCA GAG ATA CAA CTA GCT CCC TCT
     TAG TCA GGA GTG AGA GAT GAG GGT CTC TAT GTT GAT CGA GGG AGA

1981 CAC CCT TCC CTC CCT TCC TCC CTC CTT CCC TCC TTC CCT CCT TCC
     GTG GGA AGG GAG GGA AGG AGG GAG GAA GGG AGG AAG GGA GGA AGG

2026 CTC CTT CCC TCC CTC CCT CCT CCC TCC TTC CCT CCC TCC CTC AAC
     GAG GAA GGG AGG GAG GGA GGA GGG AGG AAG GGA GGG AGG GAG TTG

2071 TAT CTC TTT TAG TGA CAA CCC CAA GCC CCT TCT TAA AAT GTC AAG
     ATA GAG AAA ATC ACT GTT GGG GTT CGG GGA AGA ATT TTA CAG TTC

2116 TTC AGC CTA GAG ATG CTG CTC ACT TGG TAG AGT ATG TGC TTG CCT
     AAG TCG GAT CTC TAC GAC GAG TGA ACC ATC TCA TAC ACG AAC GGA

2161 AGA ATG CAC GAA GCC CTG AAT TCC ATC CCC AGT ATC AAA TAA ACC
     TCT TAC GTG CTT CGG GAC TTA AGG TAG GGG TCA TAG TTT ATT TGG

2206 AAC CAC GGC GGT ACA TGC TTG TAA TTC CAG CAC TCA GGA GGT GGC
     TTG GTG CCG CCA TGT ACG AAC ATT AAG GTC GTG AGT CCT CCA CCG
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Fig. 2D

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2251 CAT AGG AAA ATC AAG AGT TCA AAG GTA TTC TTG TGT TAT ACA GTG
     GTA TCC TTT TAG TTC TCA AGT TTC CAT AAG AAC ACA ATA TGT CAC

2296 AGC TGG AGG GCA ACC TGA GCT ACA TCA TAC TCT GTC ATT AAA AAA
     TCG ACC TCC CGT TGG ACT CGA TGT AGT ATG AGA CAG TAA TTT TTT

2341 AAA AAA TCC AAT TCA TAT TCT TCC ATA CCC TGG TTG CAT TTC TCT
     TTT TTT AGG TTA AGT ATA AGA AGG TAT GGG ACC AAC GTA AAG AGA

2386 GTC CTC AAT TAA TCT TCT CCT AAA CTC CTG TCA TTA GAT GTC TCG
     CAG GAG TTA ATT AGA AGA GGA TTT GAG GAC AGT AAT CTA CAG AGC

2431 CTT CAG ATT TTG CTT GTT TGA TAA GCT TCC ACT TGC CGG TCA GGA
     GAA GTC TAA AAC GAA CAA ACT ATT CGA AGG TGA ACG GCC AGT CCT

2476 ATC TGG GTA CCC TTC TAA CTG TTG GAG AAC AGT GCC TAG AAT GGA
     TAG ACC CAT GGG AAG ATT GAC AAC CTC TTG TCA CGG ATC TTA CCT

2521 GCC ACT GGC CTG GAG GTG GAC ATT AAC AAT CCA CTG AAG GAA TGT
     CGG TGA CCG GAC CTC CAC CTG TAA TTG TTA GGT GAC TTC CTT ACA

2566 GTG CAG GGA ATA ACT GAA CGA ATG AAT GAG CAA CAG AAG TTT CTA
     CAC GTC CCT TAT TGA CTT GCT TAC TTA CTC GTT GTC TTC AAA GAT

2611 GGT TTT ATC AAG GCC AAA GAG GTT GCA AGG GGG AAC TAA AGT ATA
     CCA AAA TAG TTC CGG TTT CTC CAA CGT TCC CCC TTG ATT TCA TAT

2656 GCG CTG GTC TCA GAT GTG ACT CAA GTC TCT GTC ACC TGC CTA ACG
     GCG GAC CAG AGT CTA CAC TGA GTT CAG AGA CAG TGG ACG GAT TGC

2701 CAG GGA TTT TCT TCC TTT TGT AGA AGC CAG TTG TGT AGA AGT TGC
     GTC CCT AAA AGA AGG AAA ACA TCT TCG GTC AAC ACA TCT TCA ACG

2746 ACA TCT CTC TGA ACC CAT GGC TTG ACT CCA GGA GCC CCC ATT AGA
     TGT AGA GAG ACT TGG GTA CCG AAC TGA GGT CCT CGG GGG TAA TCT

2791 GGT AAG CAT CCC CAC CCT ACC TTT TAA CTG AAG CGT GAA CAG GGG
     CCA TTC GTA GGG GTG GGA TGG AAA ATT GAC TTC GCA CTT GTC CCC

2836 GAA AAA ATA ATC CCA GCG GGC CCC CTG GGG TGT ATG AAC CGG GAT
     CTT TTT TAT TAG GGT CGC CCG GGG GAC CCC ACA TAC TTG GCC CTA

2881 GCC CAC ACC CGG ATC CCC TGC TCT GCT CCC CGC CCC ATC CCC GCA
     CGG GTG TGG GCC TAG GGG ACG AGA CGA GGG GCG GGG TAG GGG CGT

2926 GAG GGA GCG GTG CCG GGC GCG GCA GGT CTC CAA GCC GAC TAG GCT
     CTC CCT CGC CAC GGC CCG CGC CGT CCA GAG GTT CGG CTG ATC CGA

2971 GGC GCT GGC GTC GGG GCT GCG CTC CTT GGC TGG ACC CGC ATT GCC
     CCG CGA CCG CAG CCC CGA CGC GAG GAA CCG ACC TGG GCG TAA CGG
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Fig. 2E

3016 CCC TAG TGC CGC ACA GAG TCA GGG CGC CCG GGC TTC CCC GCC TGA
GGG ATC ACG GCG TGT CTC AGT CCC GCG GGC CCG AAG GGG CGG ACT

3061 TGT CAC CGC CGT GCA GTC AGC CCA GAG GCG GCT CAT TGA AAG CAG
ACA GTG GCG GCA CGT CAG TCG GGT CTC CGC CGA GTA ACT TTC GTC

3106 ACC CGC CGC GGG CCG GGC ACA GCC GGG CAC CCC CGG CCC GGC GCC
TGG GCG GCG CCC GGC CCG TGT CGG CCC GTG GGG GCC GGG CCG CGG

3151 GCG TCC TCC CCG CGC TCC CGC GCC AGC CCG GCC AGG CGC GCC TGA
GCG AGG AGG GGC GCG AGG GCG CGG TCG GGC CGG TCC GCG CGG ACT

3196 CGT GGA CCA TTA AAC TTG GAG CTC CCG CCT CGT CCC CTC TCT CCT
GCA CCT GGT AAT TTG AAC CTC GAC GGC GGA GCA GGG GAG AGA GGA
Seq. # 2 sense →

3241 CCT CCT CCC TCT GAC AGG CGA GCG AGC CGC TGG GTG CAG GCA GGC
GGA GGA GGG AGA CTG TCC GCT CGC TCG GCG ACC CAC GTC CTT CCG

3286 GAG GTG CTG CCG GGC TAG GCT GCC CGG GGG AGA TGA CTT CTC GCC
CTG CAC GAC GGC CCG ATC CGA CGG GCC CCC TCT ACT GAA GAG CGG
Promoter Seq. # 1 sense →

3336 AGG AGG ACG CCT CTG GAA AGA AGA CCA CGG AGG GAG CAA AGT TTC
TCC TCC TGC GGA GAC CTT TCT TCT GGT GCC TCC CTC GTT TCA AAG

3376 AGG GCA GCT GAG GAG CTT TGG TCG CAG CCC TTC CGA GCC CAA TCT
TCC CGT CGA CTC CTC GAA ACC AGC GTC GGG AAG GCT CGG GTT AGA
PVU II

3421 CCT CCC TGG CTA TGG AGG GCG GAC TTT AAA ATG
GGA GGG ACC GAT ACC TCC CGC CTG AAA TTT TAC